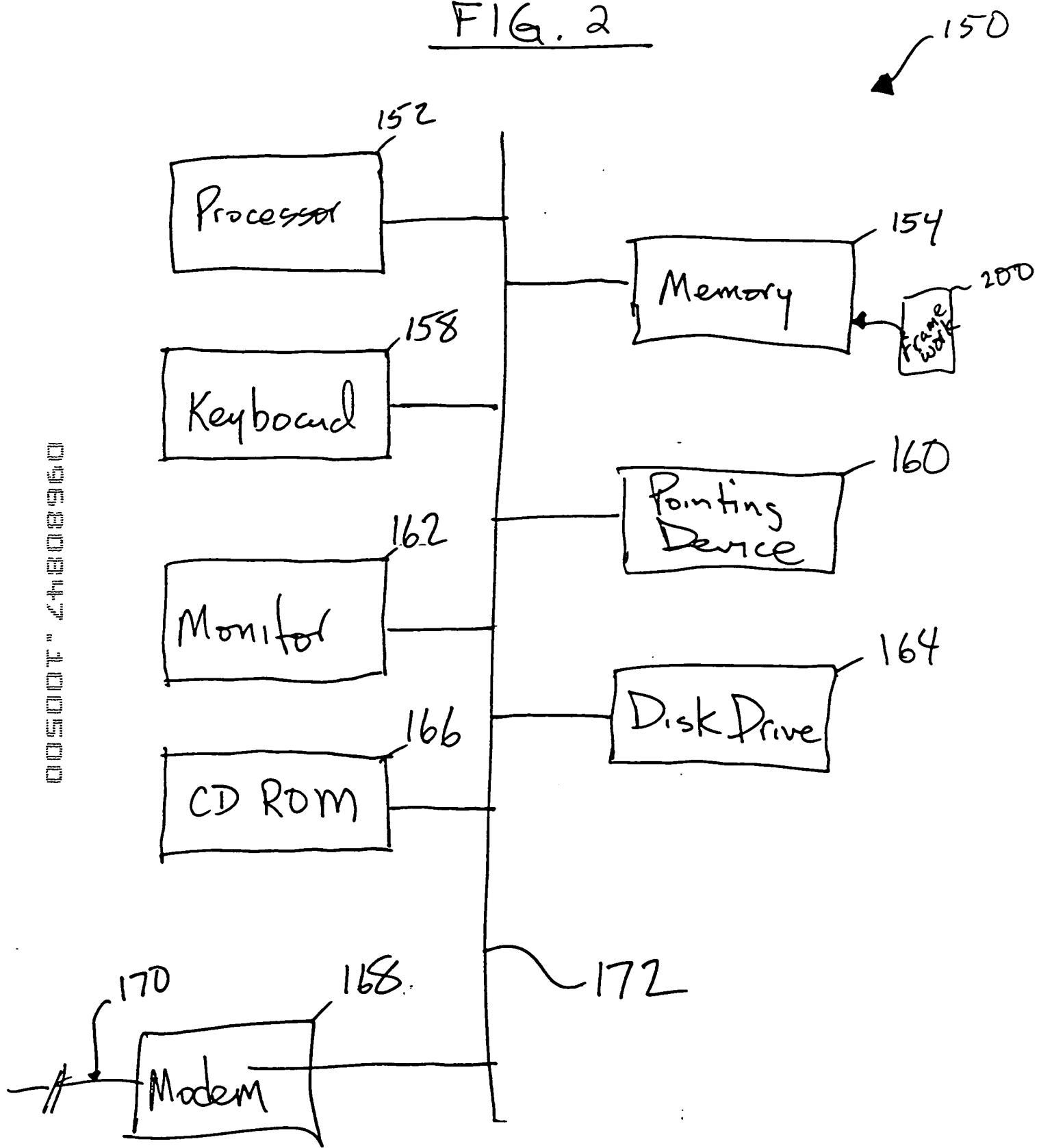
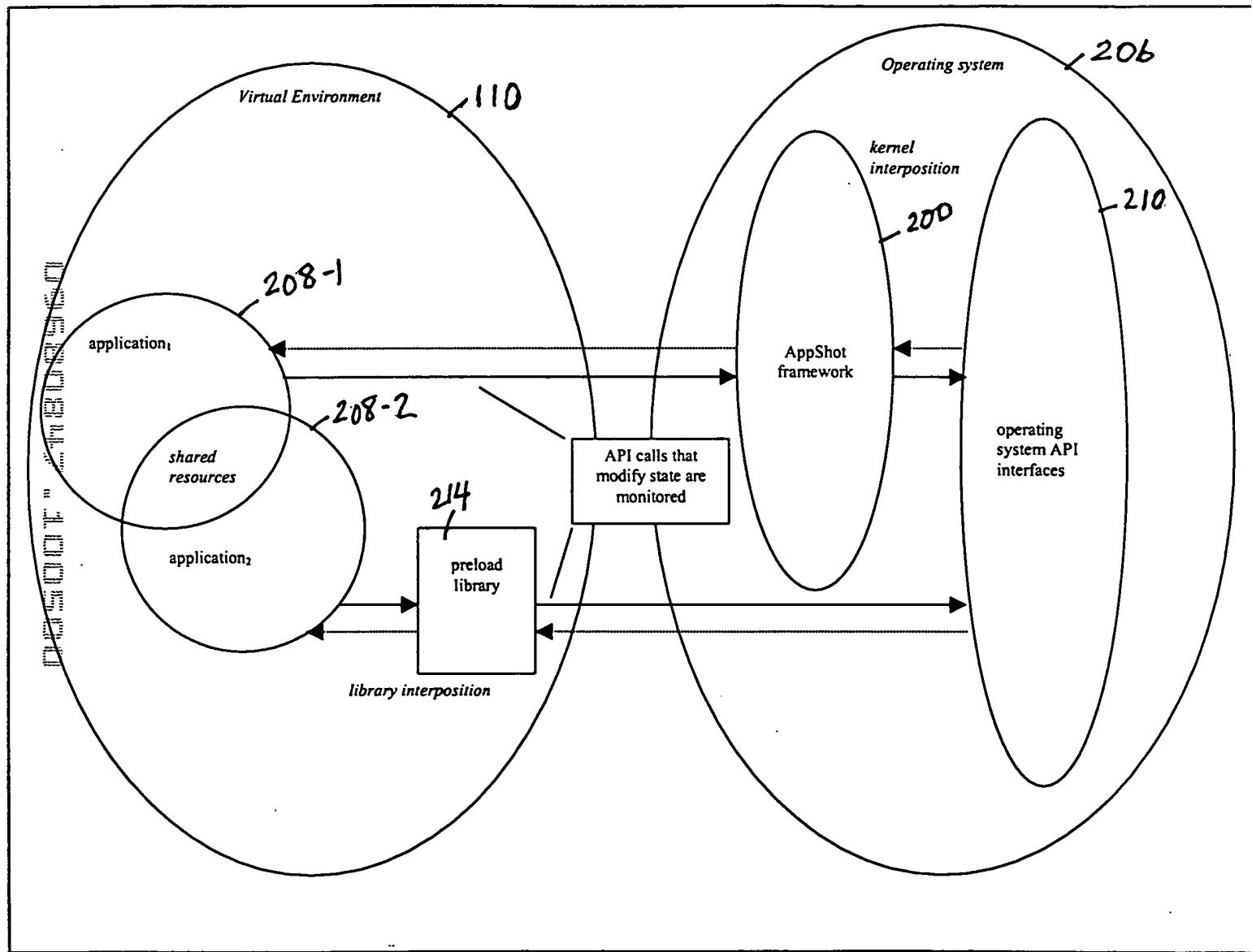


The above diagram illustrates the virtual network environments. Virtual Network Environment 1 contains one application WEB SITE 1, is defined by the Virtual Network Address 10.10.0.1 resides solely on computer 1. Virtual Network Environment 2 contains two applications, WEB SITE 2 and APP 2, and spans two computers, Computer 2 and Computer 3. The virtual network of VNE 2 is 10.10.2.0.

FIG. 1

FIG. 2





Tracking application state via library and kernel interposition.

F16.3

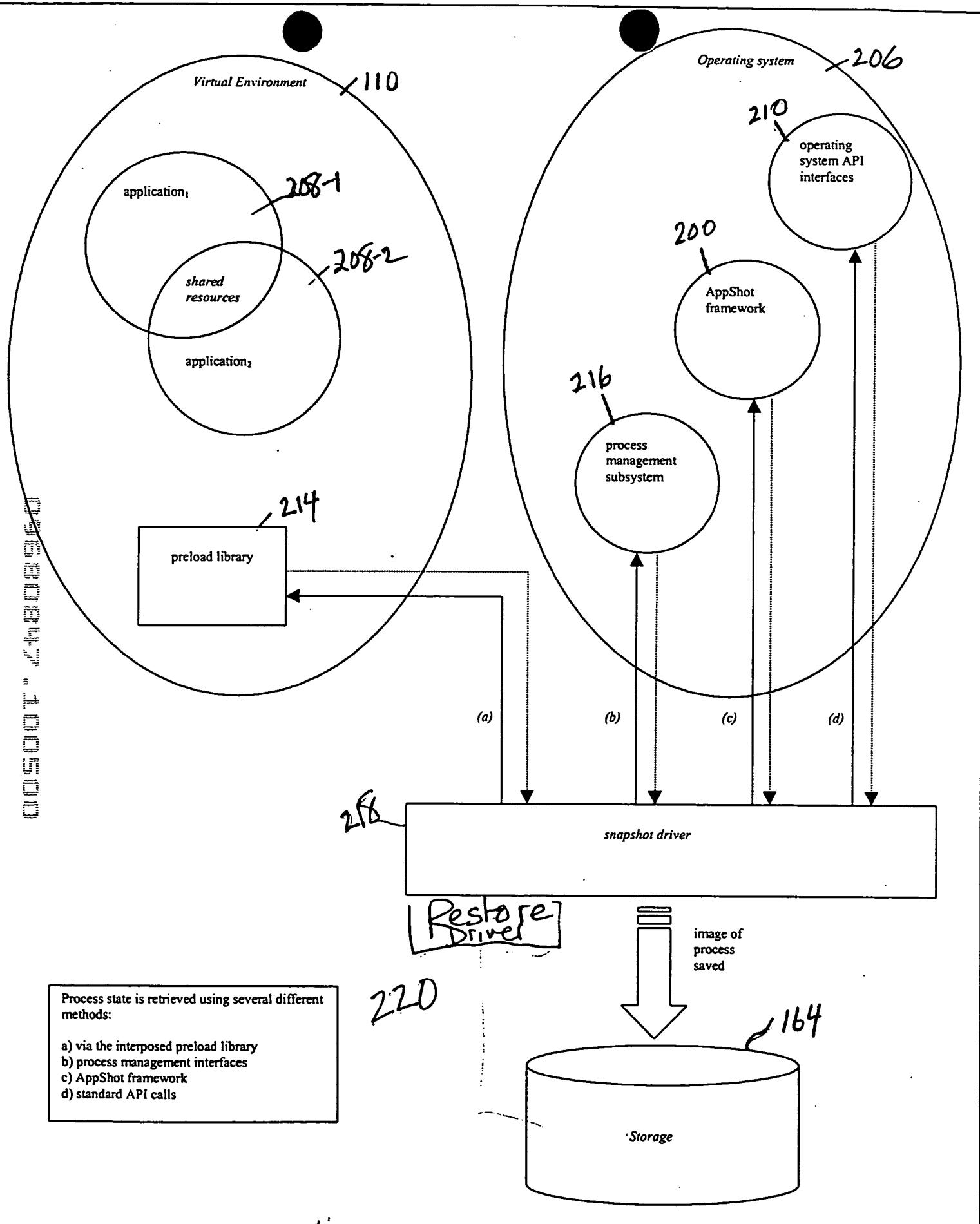
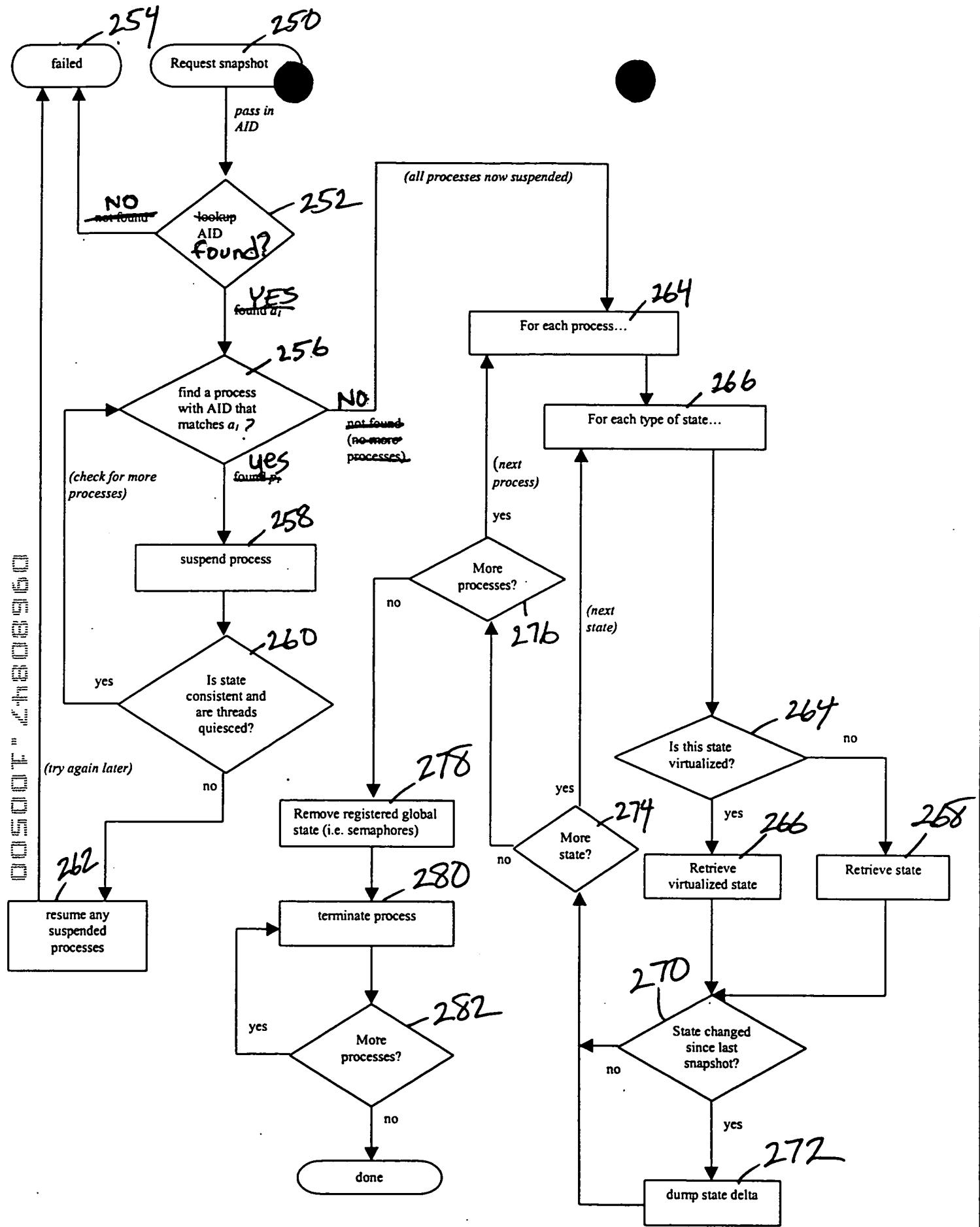


FIG. 4



Flowchart of snapshot.

F16.5

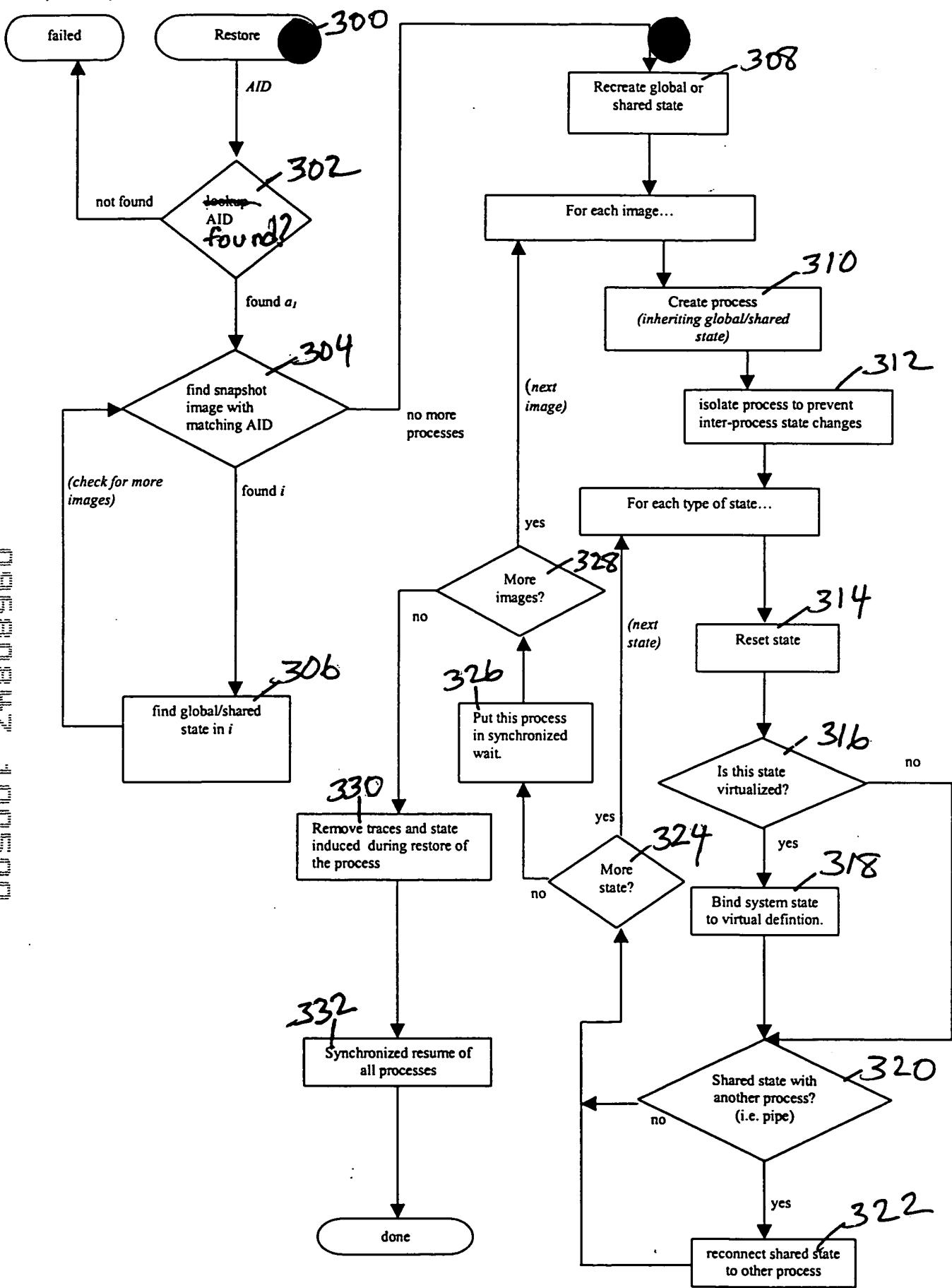


Fig 6

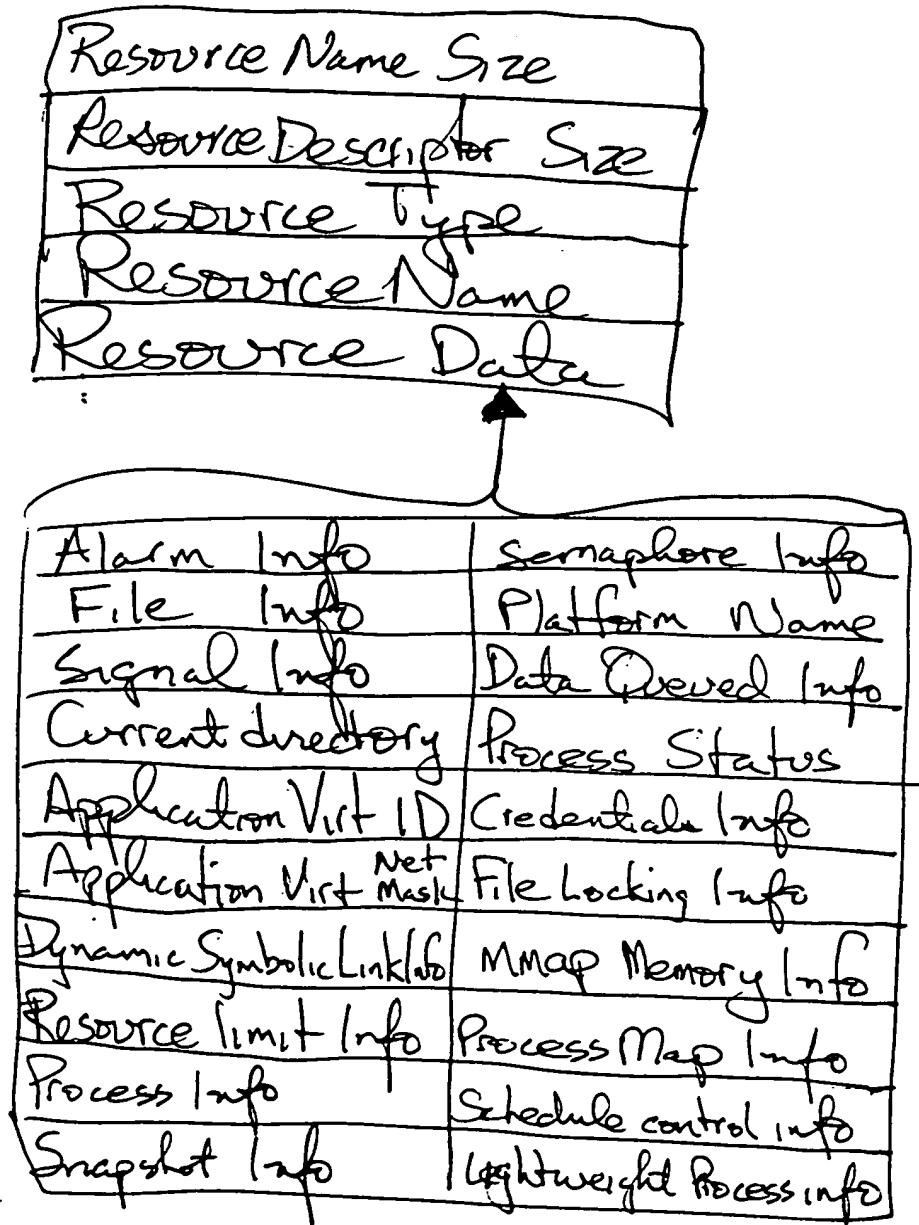


FIG. 7

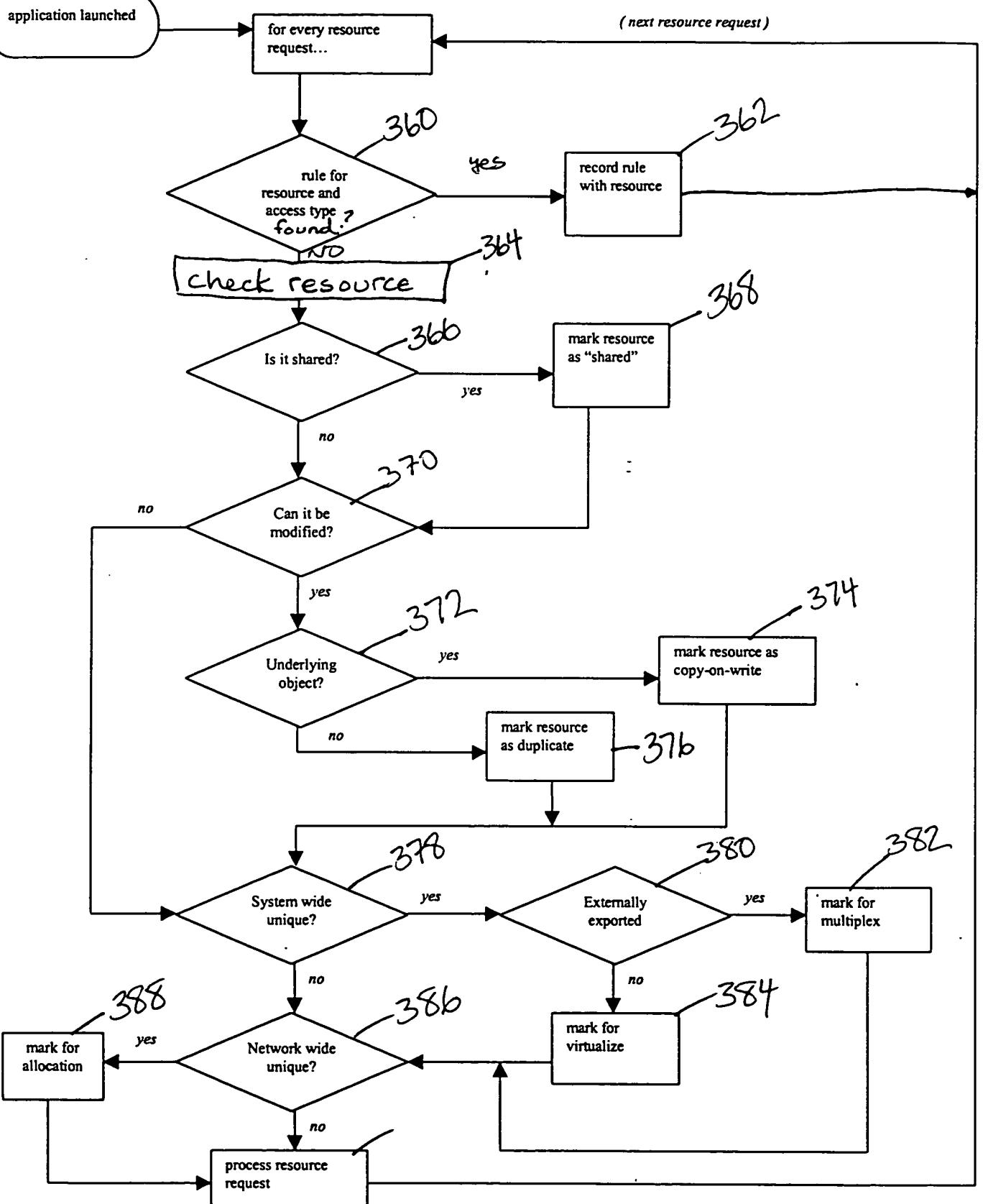


FIG.8

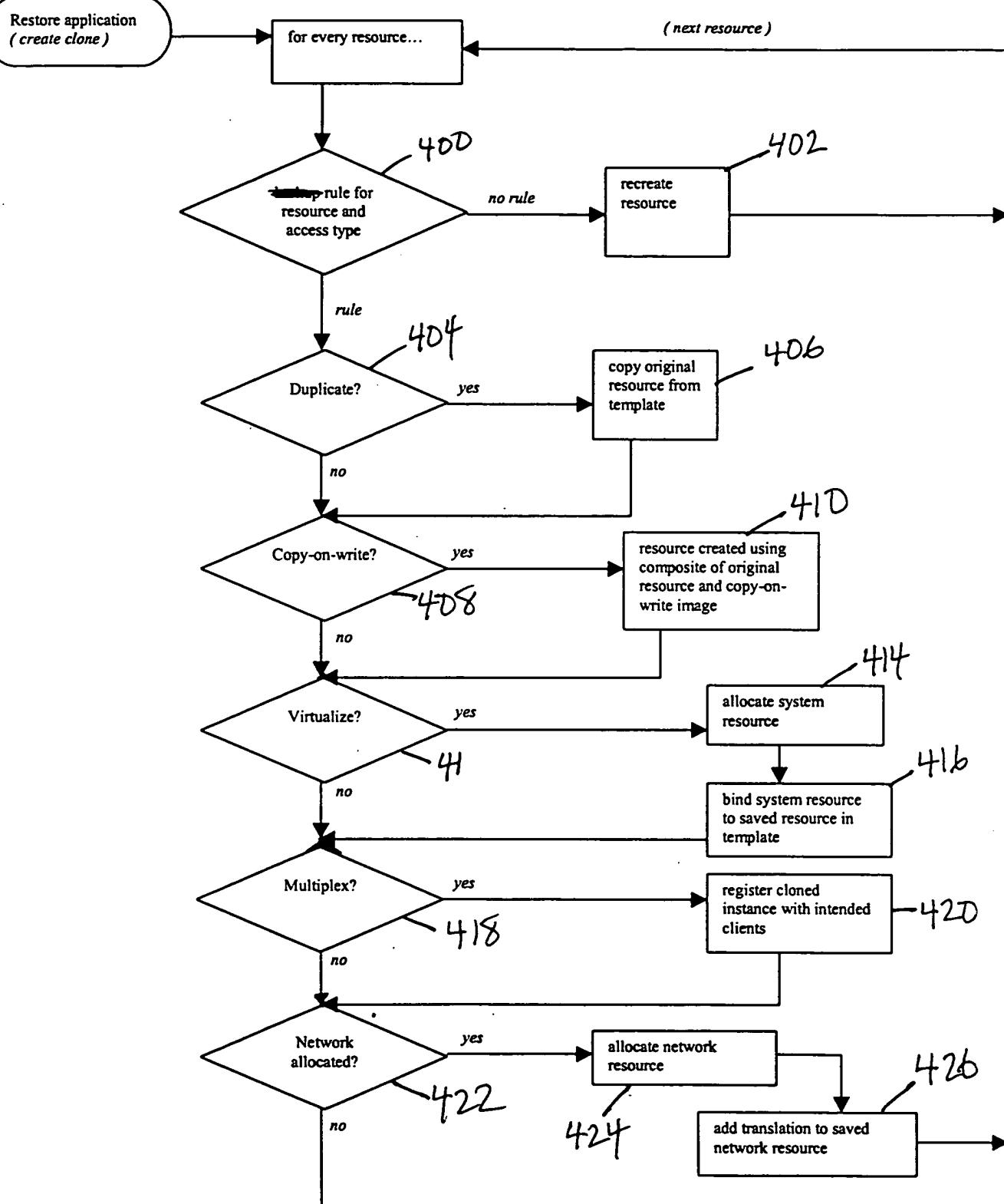
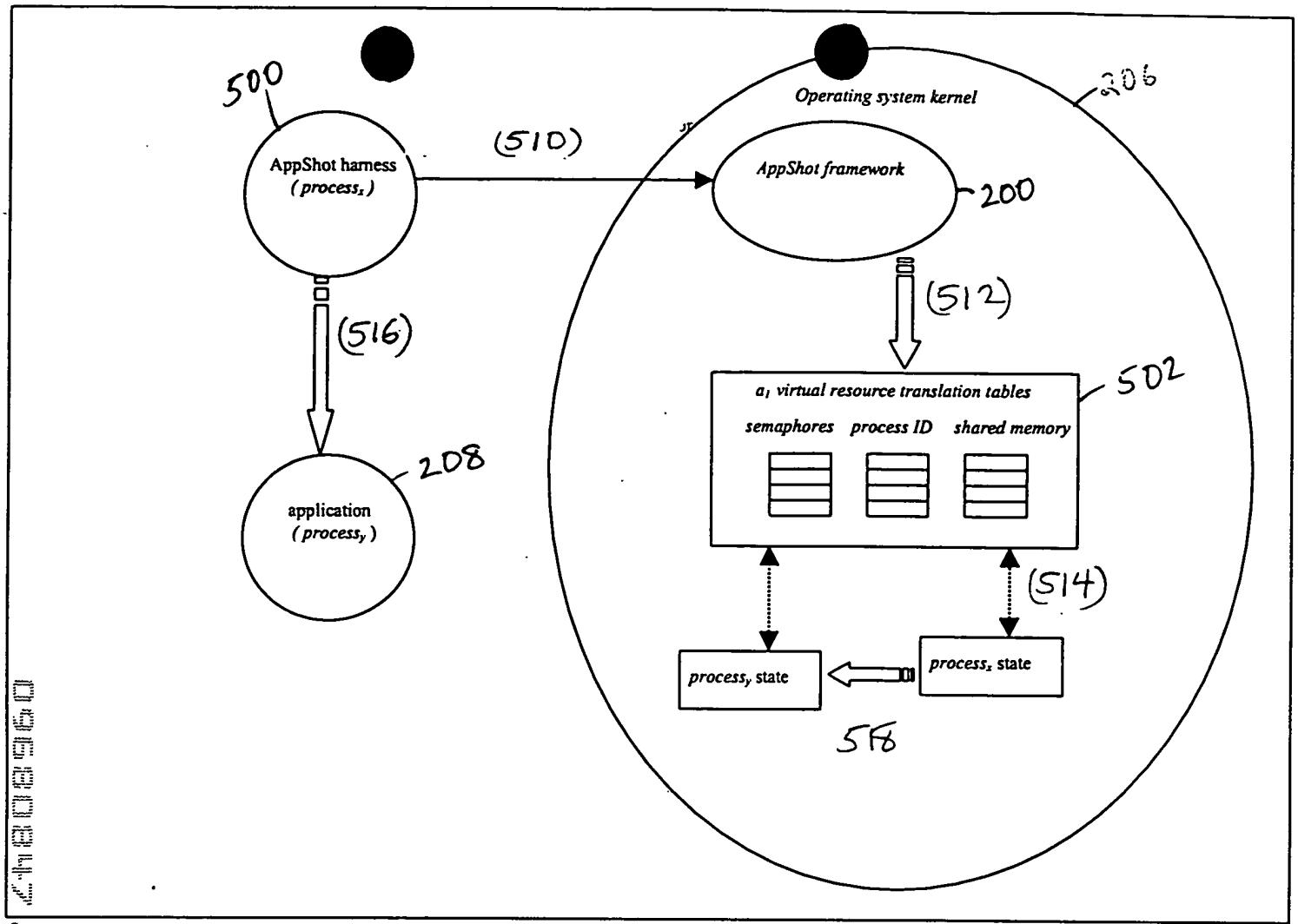
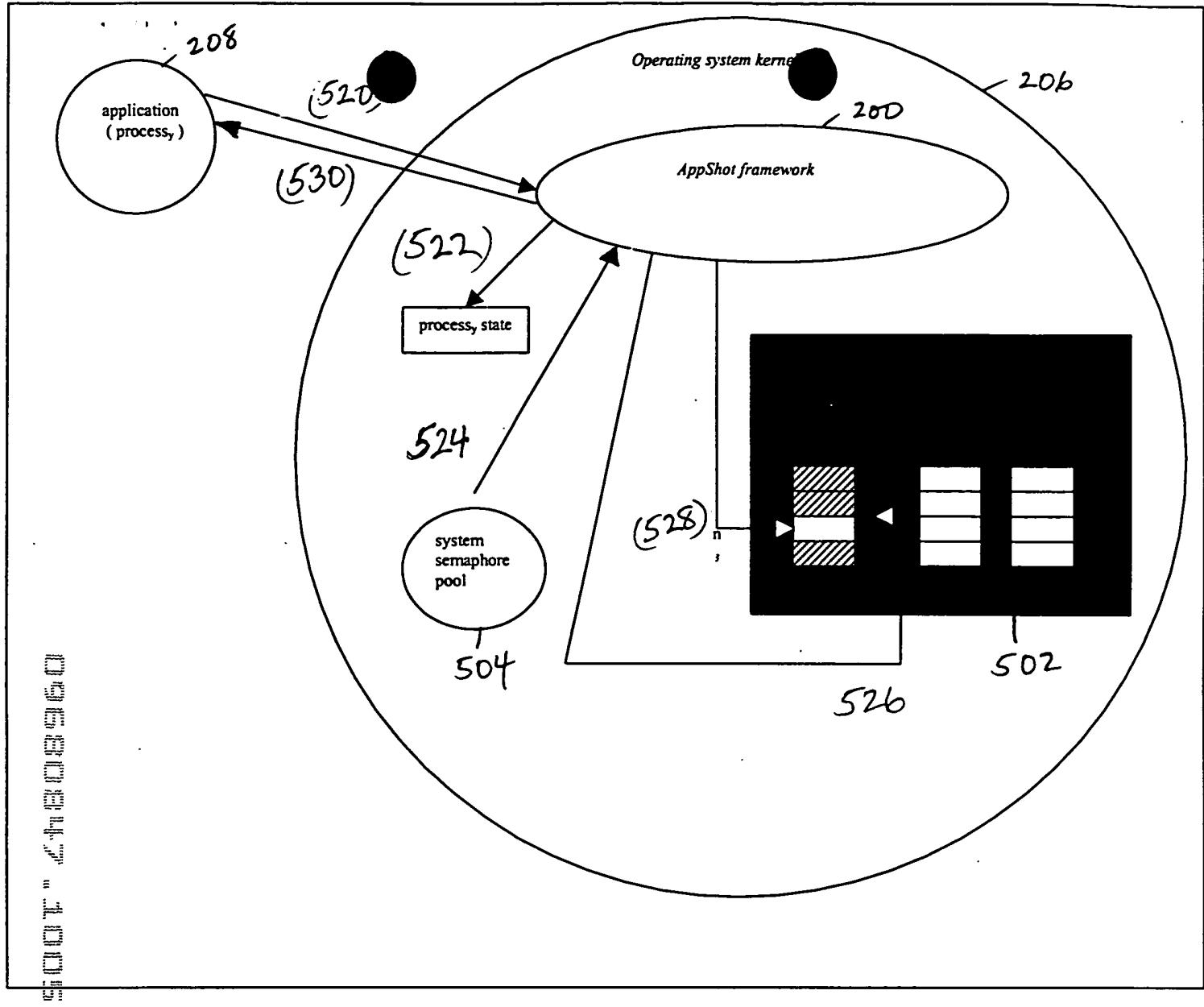


FIG. 9



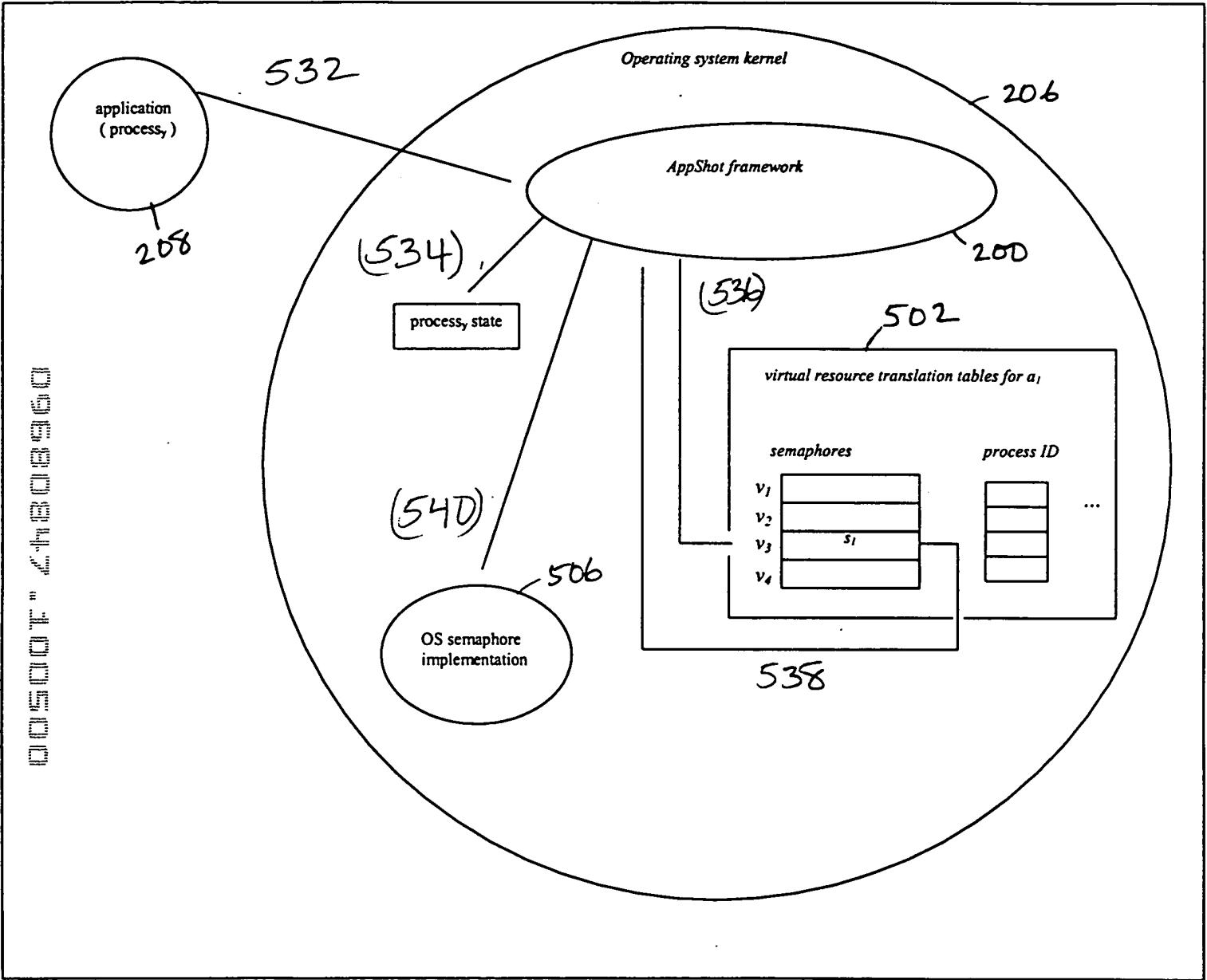
*Registration of an application using virtual resource ID's.*

FIG. 10



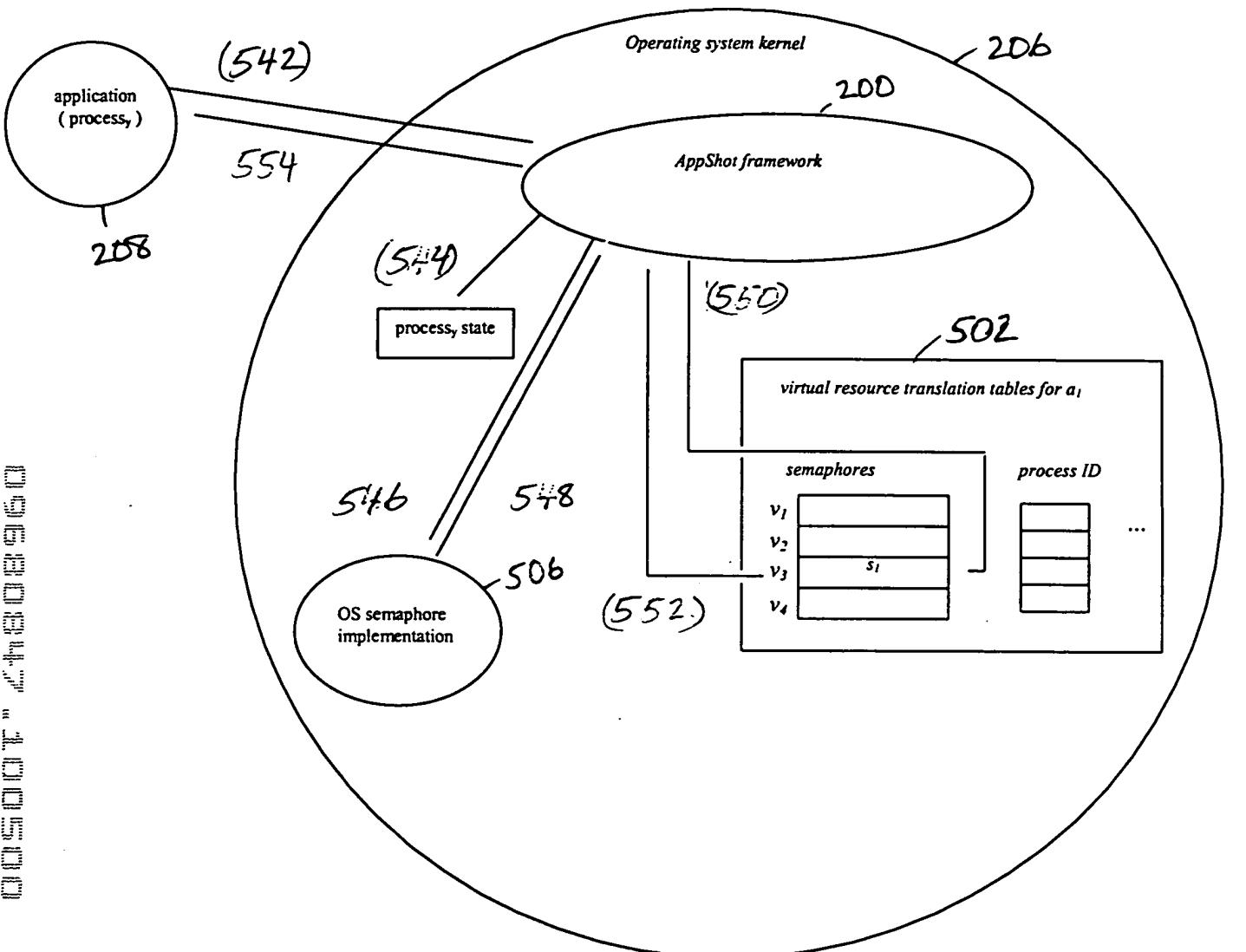
*Allocation of a virtual resource (i.e. semaphore)*

F16.11



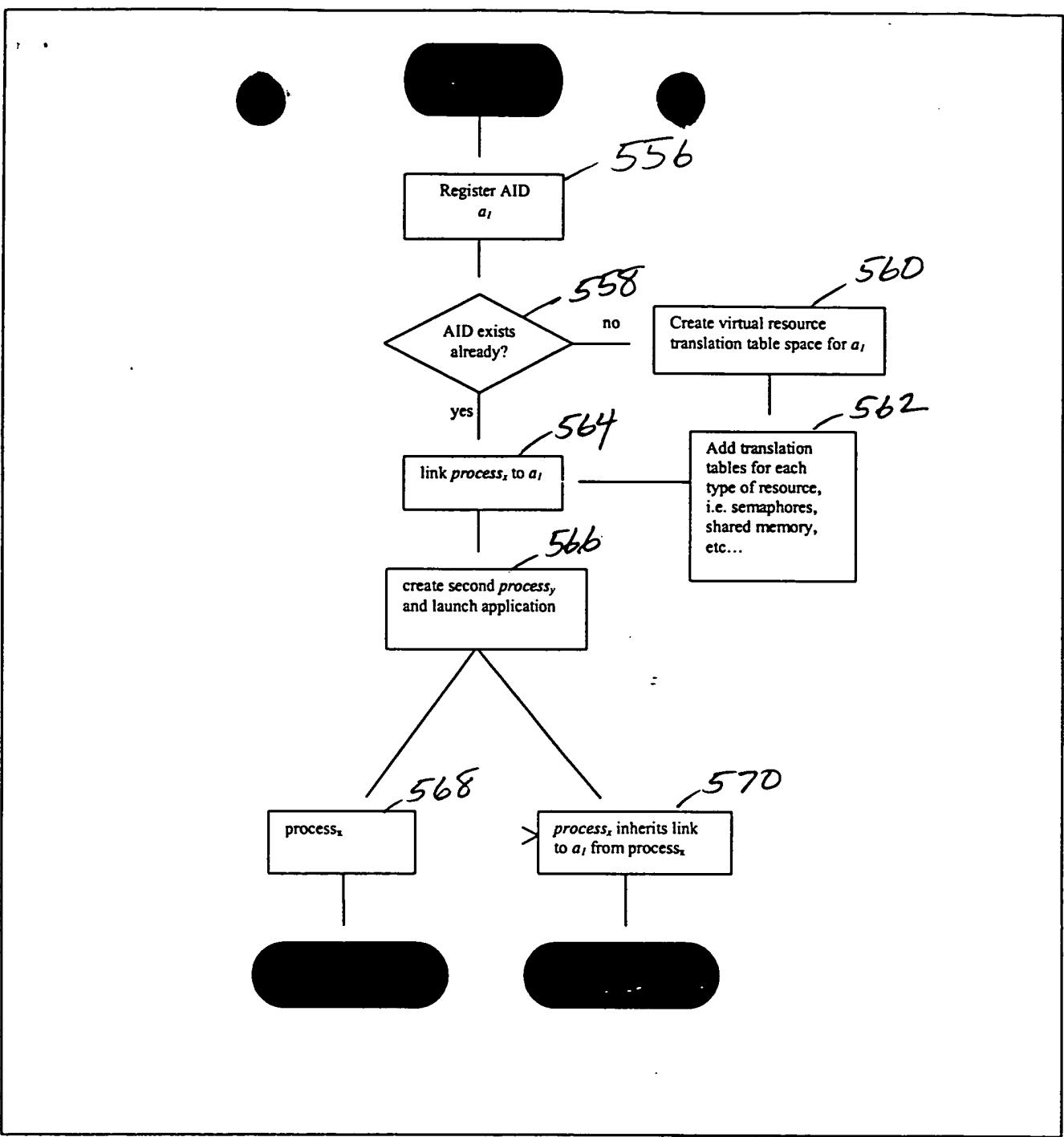
*Translation of a virtual resource (i.e. semaphore), virtual to system*

F16.12



Reverse translation of a virtual resource (i.e. semaphore), system to virtual

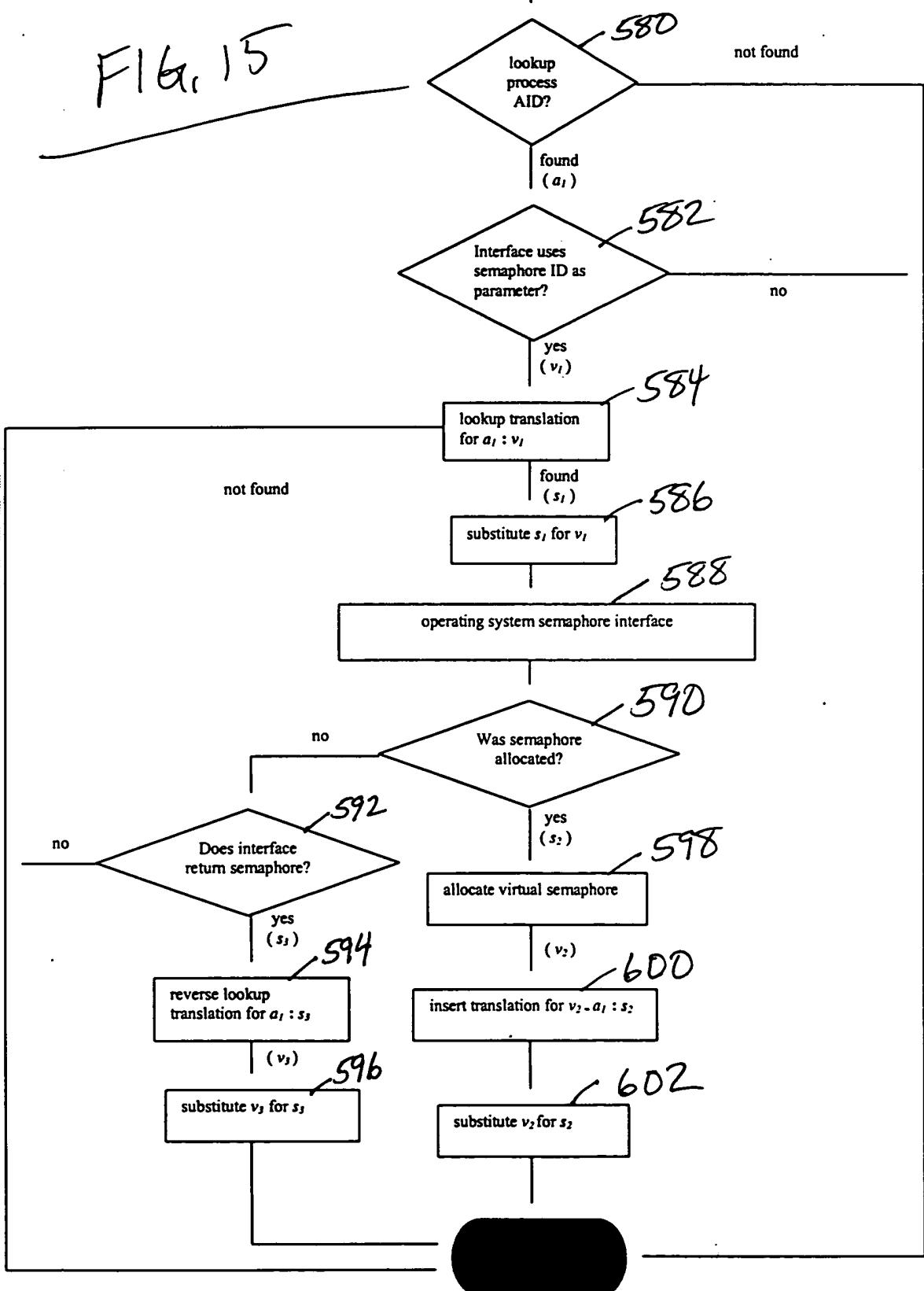
FIG. 13



*Flowchart describing creation of virtual translation tables.*

FIG. 14

Fig. 15



Flowchart depicting translation of a virtual resource (i.e. semaphore)